



CRS/Pakistan

Transitional Shelter Response for Flood-Affected Households in Sindh - # AID-OFDA-G-13-00008

QUARTERLY REPORT 01 OCTOBER 2013 – 31 DECEMBER 2013



Households participating in a village site planning exercise in Village Dost Ali Brohi in UC Nawra prior to plinth raising and shelter construction.

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Project Title: Transitional Shelter Response for Flood-Affected Households in Sindh

Project Number: #AID-OFDA-G-13-00008

Project Duration: December 03, 2012 – March 02, 2014

Project Cost: \$3,080,156

Reporting Period: October 01, 2013 – December 31, 2013

Date of submission: January 31, 2014

I. Project Background

From 7 to 10 September 2012, heavy rain inundated communities in northern Sindh, northeastern Balochistan and southern Punjab Provinces of Pakistan with more than 400mm of rain resulting in widespread flooding. Rains were heavier than normally experienced during the monsoon season, and communities received no advance warning. A number of canal breaches further exacerbated the situation and submerged many villages. It was estimated that the floods affected 939,000 people in Jacobabad District – equivalent to 89% of the total district population¹. The flooding forced many families to seek refuge on roadsides, in neighboring villages or in spontaneous settlements. The same communities in northern Sindh were also affected by the catastrophic flooding of the 2010, and had not fully recovered before they were again hit by floods. Both the 2010 and 2012 floods, although different in nature, are an unfortunate indication of future flood risks in the low-lying areas of Sindh province.

Overall the CRS Pakistan shelter program has received a total of \$3,645,836. The OFDA supported shelter program plans to support a total of 5,167 households (approximately 31,002 beneficiaries) in Jacobabad District, Sindh Province whose homes were destroyed or severely damaged in the floods. CRS has received a total of \$3,080,156 from OFDA; complemented by \$252,897 (€191,817) from Cordaid, and \$146,238 from CRS funds. In December 2013 CRS received funding from the United Nations (UN) Emergency Rapid Fund (ERF) for the construction of an additional 305 shelters in UC Narwa, District Jacobabad. In total the CRS shelter program aims to support 5,472 households - approximately 32,832 beneficiaries.

The OFDA grant has gone through a number of modifications which is represented in the table below:

Agreement #1	Modification #2	Modification #3	Modification #4	
03 Dec 2012 –	03 June –	03 Sept -	03 Nov 2013 –	
02 June 2013	02 Sept 2013	02 Nov 2013	02 Mar 2014	
(6 months)	(3 months)	(2 months)	(4 months)	
\$ 1,199,360	\$1,130,797	\$0 - NCE	\$749,999	\$ 3,080,156

CRS began implementing the shelter program in December 2012 to support households in their villages of origin in Union Council (UC) Karim Bux and later expanded the shelter programming into a further three UCs Bachro, Ahmedpur and Nawra with adequate, durable, flood resistant transitional one room shelters (ORS), aligned with both the shelter cluster approach and Sphere Minimum Standards, and incorporating essential DRR elements. The program - 'Transitional Shelter Response for Flood-Affected Household in Sindh' - will run for a fifteen months period from 3 December 2012 to 2 March 2014.

Project highlights this quarter:

- Registration of 1,165 households. New total achievement of 5,144 households (5,352 shelter kits²) (30,886 beneficiaries) from 409 villages across UC Karim Bux, UC Bachro, UC Ahmed Pur and UC Nawra
- Shelter construction is supported by 137 local skilled laborers who were trained by CRS.
- Distribution of 599 shelter materials kits. New total 4,219 shelter kits for 4,040 households¹ (23,556 beneficiaries).
- Completion of 535 shelters with plaster. New total 4,155 completed with plaster.
- Training of 210 communities on Operation and Maintenance for shelters. New achieved total of 321 communities.

¹ Multi-sector Initial Rapid Assessment (MIRA) Final Report, October 2012

² Households with 10 or more people are eligible for 2 shelters

II. Objectives:

Program Goal: Flood-affected households live in safe and dignified shelter

Beneficiaries:

- Total Number of Beneficiaries Targeted: 5,167 households (approximately 31,002 beneficiaries)
- Total Number of IDP Beneficiaries Targeted: 0 households (0 beneficiaries)
- Age and Gender Disaggregation (of registered households):

# Under 18 / Male	# Under 18 / Female	# Over 18 / Male	# Over 18 / Female	Total
10,012	8,789	5,828	6,257	30,886
32.4%	28.5%	18.9%	20.2%	100%

Indicator	Description	Target	Results - end of December 2013
Indicator 1:	Number of households in the program area receiving emergency/transitional shelter	5,167 (31,002 individuals)	4,040 households, 4,219 shelter kits (23,556 individuals)
Indicator 2:	Number of households in the program area receiving emergency/transitional shelter pursuant to Sphere Project standards and FOG guidelines	5,167 (31,002 individuals)	4,040 households, (4,219 shelter kits/ 23,556 individuals)
Indicator 3:	Percentage of total affected population in the program area receiving emergency/transitional shelter assistance, by sex	71,681 ³ HHs affected (50% male, 50% female ⁴)	4,040 HHs or 5.6% of affected population (51.3% male, 48.7% female)
Indicator 4:	Total USD amount and percent of approved project budget for emergency/transitional shelter assistance spent on goods and services produced in the affected host country economy.	\$ 2,096,623	\$ 1,492,458 71% of target
Indicator 5:	95% of targeted households (4,908 households) live in shelters that meet Sphere guidelines by 02 March 2014.	4,908 (95%)	3,978 HHs are living in 4,155 ¹ (80.4%) Sphere complaint shelters
Indicator 6:	80% of targeted households (4,133 households) report the shelter support they received was useful, timely and of good quality.	4,133 (80%)	92% of target ⁵ – of which useful (79%) ⁶ , timely (100%), and good quality (98%)
Indicator 7:	60% of targeted households (3,100 households) have started building transitional shelters within two weeks after material distribution.	3,100 (60%)	79%

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³ The Final MIRA results report a total 71,681 partially and fully damages houses in Jacobabad District

⁴ Preliminary MIRA results indicate that Jacobabad District of Sindh Province has a male to female population ratio of 50% to 50%. No figures included in the Final MIRA report.

⁵ Result from Shelter Monitoring Follow Ups (January 2014)

⁶ As per the proposal, "useful" refers to the learning of construction techniques

⁷ Result from the Technical Construction Monitoring data

III. Activities and Outputs:

Procurement:

In October 2013 CRS initiated the bidding for the procurement of shelter materials, plastic sheeting, and tools for the construction of 1,010 shelters. CRS advertised the bid on November 3, 2013, and a total of 15 vendors submitted bids. Consideration was given to price, past experience, and ability to provide the goods in a secure and timely manner according to the required quality specifications. A vendor from Islamabad was selected to provide the majority of the shelter materials by truck directly to Jacobabad. In order to ensure the highest quality standards of shelter materials before arrival to Jacobabad, the CRS Senior Quality Control Engineer with support from two other CRS staff members (Warehouse Officer and Logistics Officer) travelled to the vendor source sites in Mardan, Swabi, Shero Jangai, Kot Momin, Ganda Sing, Naro Wall, Sara-e-Alamgir, Kunda Mor, Kudian, Changa Manga, Sargodha, Bhulwal, Salam, Qasoor, Karachi, and Islamabad to inspect materials in the presence of vendor representatives. All materials were checked against American Society for Testing of Material (ASTM) and British Standards (BS). In Jacobabad, the same vendor opened up a warehouse, where beneficiaries can directly pick up materials via voucher methodology. The tools (wheel barrow and hoe) which are provided to community members for plinth raising are procured locally in Northern Sindh.

The quality of the materials is additionally checked at the vendor warehouse prior to distribution. The distribution staff from CRS and PREPARED are also present at the time of distribution of materials to ensure that beneficiaries are well oriented on the quality of the materials they should expect, and what to do in case of complaint.

CRS had budgeted a total of \$380 per shelter for each of the 4,157 shelters, and subsequently budgeted \$435 per shelter for the 1,010 shelters (amount was increased due to the change in BoQ and vendor tax rates in Pakistan). The actual cost per shelter is as follows:

	Budgeted cost per shelter (\$)	Actual cost per shelter (\$)
1) Cost per shelter (4,157 shelters)	\$380	\$341 ⁹
2) Cost per shelter (1,010 shelters)	\$435	\$35510

Overall the actual cost per shelter has been lower than budgeted.

Targeting, Household Registration and Mobilization:

To date CRS has registered a total of 5,144 households (30,886 beneficiaries) from 409 villages across all 10 *Dehs*¹¹ of UC Karim Bux, 8 Dehs of UC Bachro, 6 Dehs of UC Ahmedpur, and 9 Dehs of UC Nawra including 355 vulnerable households. Each UC was selected progressively for intervention after consultation and input from the Shelter Cluster. CRS communicates actively with all stakeholders in Jacobabad to ensure proper coordination, identify priority areas for support, and avoid overlap. CRS also regularly shares program progress via the 4W matrix with the NFI/Shelter cluster, and attended cluster meetings in Jacobabad (District), Sukkur (Provincial), and Islamabad (National) levels. For the current operational UC – UC Nawra, CRS estimates that there are a total of 1,400 households in UC Nawra requiring shelter support. With OFDA funds CRS will be able to meet 72% of the needs and ERF funds will meet remaining 28% of needs.

Prior to starting household registration for the final 1,010 shelters CRS and its partner PREPARED conducted village wide meetings with all community members to provide orientation on the targeting criteria, the shelter design, and the importance of the raised plinth and other DRR related initiatives in this program. CRS targeted households in UC Nawra whose homes were either totally destroyed or severely damaged and uninhabitable from the 2012 flood. The registration criteria were clearly displayed on pan flex banner in Sindhi, and explained

⁹ \$341 is the actual cost of the shelter for the OFDA funded materials. Cordaid additionally supported \$47 per shelter for veranda and plinth raising tools. The total cost per shelter was \$388.

¹¹ A "deh" is an administrative unit used in Pakistan that includes multiple communities but is smaller than a union council.

⁸ Funded by Cordaid for 4,157 shelters, and OFDA for final 1,010 shelters

¹⁰ Based on exchange rate of 105 PKR to USD\$. Final payments for materials have not been completed, and therefore this figure may change slightly.

to every household during registration. To date across all target UCs, 409 shelter committees have been formed to facilitate project activities in the villages signed MOUs to outline roles and responsibilities. Each committee included two female committee members.

The shelter size (12 feet x 19 feet) is consistent with the size of existing permanent houses in the area and is sufficient to house 6 family members in accordance with Sphere standards. It was envisaged that CRS would provide 2 shelter kits for families of 10 or more. Based on this criterion and the household data collected, 297 families were eligible for two shelters (6%); however, only 208 households accepted to build both shelters. The reasons given by households to only build one house were a lack of resources to raise two plinths or limited available land on which to build. CRS field staff have observed that where two shelters have been provided, some households are using this second shelter for their animals. CRS field teams have adjusted the process for larger households to provide greater mobilization to clarify the expected usage of the materials and shelter.

Number of members in HH	# of HHs	# of beneficiaries	%
6 and below	3,176	14,530	62%
7 – 9	1,671	12,961	32%
10 and above	297	3,395	6%
Total	4,155	30,886	100%

Site Planning:

In October 2013, the CRS Technical Advisor for Shelter and Settlements travelled to Jacobabad and provided training to CRS and PREPARED program teams in village site planning for shelters. Although CRS field teams had some knowledge of site planning, there was not a specific purposeful site planning component incorporated into the methodology of the shelter program. CRS and PREPARED staff developed model shelters, hand pumps and latrines, and together with the Technical Advisor field tested site planning with new communities (who would be later targeted for shelter support). The focus of the site planning exercise with communities is to focus on disaster resilience, but also ensuring that village planning takes account of other infrastructure (hand pumps latrines, mosque, etc.) and also social elements (privacy, security, access, etc.). Considerations such as drainage during flooding, rain water run-off from the roofs, and village evacuation planning is also discussed with communities. The Site Planning Guidelines developed for Northern Sindh are attached as **Annex A.**

Overall, the site planning exercise has been appreciated by both communities and the CRS/PREPARED staff members and for the 1,010 shelters to be constructed the CRS/PREPARED field teams conducted a site planning exercise in each target village with both beneficiaries and non-beneficiaries. Wherever possible CRS has tried to facilitate a mixed gender session, and if this was not possible then consent by the female community representatives was sought immediately after completing the exercise. By end December 2013, CRS has completed site planning for 81 villages, and each session took approximately 1.5 hours. The field teams have observed that challenges/conflict on site selection is being resolved during the exercise as all households collectively decide on the appropriate site for each shelter.

Plinth raising:

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Following registration and the site planning exercise, CRS and PREPARED staff orient households for the raising of a plinth. The raised plinth is a precondition for each community before shelter kits are distributed and a key DRR element designed to protect homes from flooding in the future. CRS distributes tools¹² to each village to support households' efforts. In each village, CRS and PREPARED held comprehensive community discussions on the expected origin of the mud to ensure that mud was taken from unused, non-agriculture land, and would not create new hazards within the community. CRS field teams have found that soil is readily available with UC Nawra, and that communities have been very proactive to raise their plinths. In addition to

¹² One hoe/spade per household, and 2 wheel barrows for every 5 households. The estimated cost per household is \$10.

the availability of soil, communities in UC Nawra did not receive shelter assistance following 2010 floods and therefore have been very keen to engage fully in the program and raise their plinths.

Distribution of shelter materials:

Following household registration and the raising of plinths, CRS and PREPARED distributed a Shelter Material Voucher to each household. Each voucher clearly shows the name of the beneficiary, CNIC number, voucher distribution date, material collection date, and the full BoQ of the material each household would receive. At the time of voucher distribution, CRS explained to each household the material collection process and location of the vendor warehouse in Jacobabad city.

On distribution days, beneficiaries come to the vendor warehouse with their own transportation to collect the materials. Upon arrival to the warehouse, CRS and PREPARED staff members provide a full orientation to beneficiaries on the process and materials to be collected, and a great focus on the reporting period has been placed on fully orientating beneficiaries that they are welcome to reject any materials which do not meet their quality expectations. Two Panaflex banners are also located at the vendor warehouse with a list of all materials the households are eligible to receive. Beneficiaries then select the shelter materials they prefer¹³. During the reporting period 599 shelters kits were distributed from the vendor warehouse. In total 4,219 shelters kits have been distributed to 4,040 families.

CRS and PREPARED conduct an exit interview at the vendor warehouse at each distribution day with a random selection of beneficiaries. The information from the exit interview is reviewed on a daily and weekly basis by the Program Manager. To date a total of 306 shelter recipients gave feedback. Key results include:

- 99% had received sufficient information prior to arriving to the distribution point and that the distribution timing was appropriate, and 100% felt the distribution location was appropriate.
- On average beneficiaries waited for 47 minutes at the distribution site before receiving materials, and 97% felt that this was an appropriate time to wait.
- 98% stated that they received all the items that they had expected, 0.5% stated that they had anticipated receiving plastic sheeting ¹⁴, whereas 1.5% stated about the poor quality of bamboos and chick mate. 98% had planned transport for materials prior to distribution day, with 91% transporting materials by tractor trolley, 2% by medium sized Mazda truck and 7% by large truck. On average beneficiaries paid 739 PKR for their transport which is 139 PKR higher than the 600 PKR provided through the program.
- 88% stated that they knew how to contact CRS or PREPARED.

Shelter construction:

At the end of December 2013, a total of 4,155 core shelters were constructed with the support of the skilled laborers and all have also been completed with mud plaster. CRS and PREPARED's technical teams were in the field daily to visit targeted villages and provide technical support and guidance.

Overall CRS and PREPARED have trained a total of 137 skilled laborers on the construction of the shelters according to the design and specifications of the shelters. No new skilled laborers were trained in the reporting period. CRS discussed and signed a formal agreement with each skilled labor in the presence of village committees. During the reporting period, CRS has paid a total of \$7,652 through OFDA funds skilled laborers. Since the start of the grant, CRS has paid a total of \$39,935 to 137 skilled laborers, for work on an average of 30 shelters each. A story highlighting the success of working with local skilled laborers is attached as **Annex B.**

¹³ Beneficiaries select bamboos and poplar columns from the stockpiles. All materials have the same specifications but differ sometimes in how straight they are or thick they are because they are natural materials.

¹⁴ This feedback was received from the beneficiaries who did not receive plastic sheeting, due to receiving at an earlier date from Save the Children

O&M/ DRR:

CRS and PREPARED have developed an Operation & Maintenance / DRR manual, which focuses on sensitization and mobilization exercises to ensure the perpetual maintenance of the shelter and adopting those practices which would help in reducing the risks during disaster. The community O&M session is a half day activity in which the shelter committee members are trained (7 people, 5 male 2 female). The shelter committee is made responsible to ensure the adherence to the O&M guidelines, and sharing information with shelter beneficiaries in their communities. Non-beneficiary households are also welcome to attend the training. During the reporting period total of 210 O&M sessions were conducted with 1,470 members of the village shelter committees. Overall to date a total of 321 O&M sessions have been conducted in 321 villages reaching 2,247 committee members.

Transportation Payments:

CRS budgeted 600 PKR per shelter for the purpose of transporting shelter material from the vendor warehouse to the village. This payment is made after completion of the shelter with mud plaster. In total \$21,305 has been paid for 4,123 shelters for the transportation. CRS had planned to make payment to 4,157 shelter households, however as reported in the last Quarterly Report 34 families migrated to Baluchistan before receiving transportation payment. In addition 306 Cash Grant payments, each amounting to 600 PKR, have also been made to vulnerable households for unskilled labor totaling \$1,760.

Follow up on challenge of insects:

One challenge experienced by the shelter program within the reporting period has been the presence of termites/insects within the constructed shelters, despite a number of preventative measures taken. The presentation of termites/insects is common in the monsoon season (July and August) in Sindh. CRS and the contracted material vendor took a number of preventative measures from early August in order to maximize protection for the materials which were stacked in the vendor warehouse in Jacobabad:

- (i) The vendor sprayed all materials with kerosene at the beginning of August 2013,
- (ii) The vendor restacked materials (vertical standing, rather than lying horizontally) to try to prevent insect infestations.

From late August 2013, shelter materials were distributed/collected by beneficiaries from the vendor warehouse. Prior to distributions CRS and vendor staff inspected the quality of the materials, and separated non-affected materials and replaced any visibly infected materials. However, despite these preventative measures there was visible infestation of insects in some communities after the shelters were constructed. A Shelter Material Observation Survey was conducted in October 2013. The objectives for the Shelter Material Observation Survey were to:

- 1. Establish the severity and extent of damages caused by insects¹⁵
- 2. Understand when insects were first observed and if this was communicated to CRS, PREPARED, or the local vendor
- 3. Identify low cost and appropriate treatment options for already infected bamboos and how to orientate community members about prevention measures

CRS consulted the Heritage Foundation, Shelter Cluster, other NGOs, technical resources¹⁶, technical engineering staff, local shop keepers, local masons, and the CRS Technical Advisor for Shelter in order to increase our understanding of termite/insect prevalence, prevention methods, and the impact on structural integrity of the shelters. Based on the results of the Shelter Material Observation Survey and consultations, the following complementary solutions will be implemented:

1) Chemical spray and safety training to be provided for all shelters – this includes all shelters constructed to date (4.157) and new shelters under construction (1.010).

¹⁶ For example – Humanitarian Bamboo Guidelines – <u>www.bamboo.org</u>

¹⁵ Poplar wood has been impacted by termites, and bamboo has been impacted by a small flying beetle insect. The insects create holes and a powdery dust, whereas the termites characteristically produce a mud-dust.

2) Inclusion of insect preventative recommendations within O&M trainings.

A key outcome from this process has been the capacity building of CRS and PREPARED field staff in the identification, categorization, and solution for termites/insects. Through discussions with external stakeholders it was clear that although termites/insects were a challenge – CRS had taken all the necessary preventative measures in the lead up to distributions. The provision of chemicals will be implemented in January/February 2014 with CRS private funds. All shelter beneficiaries will receive the chemical spray together with a full orientation on application safety guidance. The summary of the material observation survey report and recommendations is attached as **Annex C.**

Accountability, Monitoring and Evaluation:

CRS and PREPARED conduct regular program monitoring activities – both through their day to day visits within the communities and specific monitoring exercises. This is in addition to a comprehensive accountability and transparency mechanism for both beneficiaries and non-beneficiaries to contact CRS. Regular monitoring activities included:

- Weekly programmatic planning and reflection sessions
- Weekly review of complaints database
- Exit interviews at distribution points
- Real Time Evaluation (conducted in April 2013)
- Technical construction monitoring
- Shelter monitoring follow ups (January 2014) specifically looking to address Indicator 6.

CRS maintains a feedback accountability tracking sheet which is reviewed by the Program Manager and field teams on a daily and weekly basis. During the life of the shelter program CRS received a total of 264 questions from community members. These were received via complaint/suggestion box at vendor warehouse during distributions (78%), directly to staff during field visits (17%), helpline number (3%), and directly by telephone to field staff (2%). Overall 98% of the questions regarded shelter, with the majority of requests for CRS to revisit the village and provide shelters to eligible persons (missed or displaced at the time of registration), registered households who were not present in the village during the distribution of Shelter Material Vouchers, missing materials following collection from the warehouse, and requests from neighboring villages or UCs for shelter support. No complaints were received for material quality or presence of insects. For each complaint, CRS field teams would follow up in the community to verify the information received, and if there were missing and eligible households then they would be registered for support.

In the final two weeks of the project, CRS plans to conduct a (internal) final evaluation of the project.

IV. Analysis of Project Activities

- a. Program Successes
- **Site Planning:** CRS has introduced site planning into the shelter program activities for the final 1,010 shelters to be constructed in UC Nawra. This exercise is beneficial for disaster resilience of the villages and mitigating the risk of conflicts.

b. Challenges and Constraints

• **Migration in and out of UC Nawra:** UC Nawra has a large number of migrants from other UCs who temporarily live in UC Nawra only during *Kharif* (cultivation to crop) timing and then move to their UC of origin. During their stay in UC Nawra they typically live in temporary shelters. The identification of the temporary economic migrants is difficult if the village committee is not supportive or fair to identify the families who are permanent residents versus temporary residents. The precondition of plinth raising is helping in filtering out temporary residents as they refuse to raise plinth due to the cost and investment of time / workmanship.

VI. Activities Planned for the Next Quarter:

The main activities planned for the next period are as follows:

- Distribution and orientation to all households on insect spray
- Registration of final 185 shelters in UC Nawra, distribution of shelter materials and technical support to the construction of shelters.
- O&M sessions.
- Skilled labor and transportation and Cash Grant payments.
- Final evaluation
- Program closure

Annexes

- Annex A CRS Pakistan Site Planning Guidelines
- Annex B Human Interest Story
- Annex C Summary of the Material Observation Survey Report and Recommendations